

In the Claims:

- 1 1. (Currently amended) A method of processing a surface of a
2 nitride semiconductor crystal, wherein comprising
3 bringing a surface of a nitride semiconductor crystal
4 is brought into contact with a liquid containing at least
5 Na, Li or Ca as a processing solution consisting
6 essentially of one or more members selected from the group
7 consisting of Na, NaNH₂, NaI, NaBr, NaCl, Li, LiNH₂, LiI,
8 LiBr, LiCl, LiF, Ca, CaI₂, CaBr₂, and CaCl₂.
- 1 2. (Currently amended) The method of processing a surface of
2 a nitride semiconductor crystal according to claim 1,
3 wherein said processing solution is a liquid containing
4 contains at least Na and has an Na content of 5-95 mol%.
- 1 3. (Currently amended) The method of processing a surface of
2 a nitride semiconductor crystal according to claim 1,
3 wherein said processing solution is a liquid containing
4 contains at least Li and has an Li content of 5-100 mol%.
- 1 4. (Previously presented) The method of processing a surface
2 of a nitride semiconductor crystal according to claim 1,
3 wherein said nitride semiconductor crystal is an
4 Al_xGa_yIn_{1-x-y}N semiconductor crystal ($0 \leq x \leq 1$, $0 \leq y \leq 1$,
5 $0 \leq x + y \leq 1$).

1 5. (Currently amended) A system comprising a liquid processing
2 solution that consists essentially of one or more members
3 selected from the group consisting of Na, NaNH₂, NaI, NaBr,
4 NaCl, Li, LiNH₂, LiI, LiBr, LiCl, LiF, Ca, CaI₂, CaBr₂, and
5 CaCl₂, and a nitride semiconductor crystal having that has
6 a maximum depth of a surface scratch of at most 0.01 μm
7 on a surface thereof that ~~and obtained with a method of~~
8 ~~processing a surface of a nitride semiconductor crystal~~
9 ~~wherein a surface of a nitride semiconductor crystal is~~
10 brought into contact with ~~[[a]]~~ the liquid containing at
11 ~~least Na, Li or Ca as a processing solution.~~

1 6. (Currently amended) The ~~nitride semiconductor crystal~~
2 system according to claim 5, wherein said processing
3 ~~solution is a liquid containing~~ contains at least Na and
4 has an Na content of 5-95 mol%.

1 7. (Currently amended) The ~~nitride semiconductor crystal~~
2 system according to claim 5, wherein said processing
3 ~~solution is a liquid containing~~ contains at least Li and
4 has an Li content of 5-100 mol%.

1 8. (Currently amended) The ~~nitride semiconductor crystal~~
2 system according to claim 5, wherein said nitride
3 semiconductor crystal is an Al_xGa_yIn_{1-x-y}N semiconductor
4 crystal ($0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq x + y \leq 1$).

1 9. (Currently amended) A system comprising a liquid processing
2 solution that consists essentially of one or more members
3 selected from the group consisting of Na, NaNH₂, NaI, NaBr,
4 NaCl, Li, LiNH₂, LiI, LiBr, LiCl, LiF, Ca, CaI₂, CaBr₂, and
5 CaCl₂, and a nitride semiconductor crystal having that has
6 an average thickness of a damaged layer of at most 2 μm
7 on a surface thereof that ~~and obtained with a method of~~
8 ~~processing a surface of a nitride semiconductor crystal~~
9 ~~wherein a surface of a nitride semiconductor crystal is~~
10 brought into contact with ~~[[a]]~~ the liquid containing at
11 least Na, Li or Ca as a processing solution.

1 10. (Currently amended) The ~~nitride semiconductor crystal~~
2 system according to claim 9, wherein said processing
3 solution ~~is a liquid containing~~ contains at least Na and
4 has an Na content of 5-95 mol%.

1 11. (Currently amended) The ~~nitride semiconductor crystal~~
2 system according to claim 9, wherein said processing
3 solution ~~is a liquid containing~~ contains at least Li and
4 has an Li content of 5-100 mol%.

1 12. (Currently amended) The ~~nitride semiconductor crystal~~
2 system according to claim 9, wherein said nitride
3 semiconductor crystal is an Al_xGa_yIn_{1-x-y}N semiconductor
4 crystal ($0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq x + y \leq 1$).